

be done by, will attend to supplying the necessary papers with the least possible delay. The breeder who is careless or negligent in the matter of keeping private records of the pedigrees of his stock, and of dates of service and birth, and of the sire used in each case, will surely find himself in frequent trouble, and will cause no end of trouble and vexation to his customers. The business breeder will take an interest in seeing that stock sold for shipment by him is shipped in good condition, clean and free from lice or disease, with sufficient feed and bedding supplied for the trip; if necessary, blanketed in cold, or shaded by a light covering in hot weather; and, if the animal is tied in the car, will see that the halter does not draw too tightly on its head, and that the shank is long enough to allow the animal to lie down comfortably, and will give instructions, if necessary, for feeding and watering on the way. If it be a pig or sheep or fowl, to be shipped in a crate, he will see that the crate is strong, sufficiently roomy to avoid cramping, and not heavier than is necessary, since the transportation charges are according to weight, the crate included. For small animals, half-inch lumber, 4 to 6 inches wide, for the side boards, is generally sufficiently strong, if well braced; while, for heavy animals, lumber one inch thick throughout is strong enough. It is a good plan to keep on hand a stock of material of standard sizes, ready for immediate use when needed, and crates of different sizes may be made on rainy days, ready for use when required. The business breeder will have his address printed on his letter-heads and envelopes, and address cards to tack upon his shipping crates or tie upon the halter of the animal shipped, thereby advertising his stock and himself as a breeder of some consequence. The old saying, "What is worth doing, is worth doing well," applies with full force in the shipping of stock, and is a paying proposition, since the business character of the man will be judged, to a considerable extent, by the attention given to doing things well.

DIPPING THE FLOCK.

The external parasites of sheep are not very numerous nor difficult to combat. Most trouble comes to the average flock from ticks and scab, both of which can be very readily kept under control. Ticks are indigenous, but are easily disposed of. On account of their universality, ticks are a great annoyance and a serious menace to the whole sum of one's profits. At this season of the year, the warm weather and clipping causes the ticks to leave the ewes and take up their abode upon the lambs. If there is any considerable number of ticks, they will keep both the ewes and the lambs from thriving. It, therefore, behooves any man desiring to prosper with his sheep to rid them of these pests. This is done best and easiest by dipping.

There are many reliable dips in the market, of which there is none easier, cheaper, pleasanter, or more effective to work with, than the coal-tar dips. It will not pay a man to take time to manufacture his own remedy. A 2-per-cent. solution—i. e., 2 parts of the coal-tar product in 100 parts of water, gives a sufficiently strong mixture. These dips can be obtained from your druggist, or ordered directly from the manufacturer.

If a man has a very few sheep and lambs, he may apply the solution from a tub with a brush, or by pouring from a coffee pot, but this method is not absolutely sure in its results. For a flock of twenty or more sheep, it will pay to obtain or build a dipping tank. Except for very large flocks, a tank measuring 12 feet long, 4 feet deep, and 20 inches wide, is sufficient. Make one end perpendicular and the other end sloping, thus making the bottom but 6 feet long. These tanks may be purchased, or may be built of cement or of wood, and set in the ground. The sloping surface may be cleated, to enable the animal to walk out of the tank. Leading to the perpendicular end of the vat, have a narrow runway from a small pen. At the other end build an inclined platform large enough to hold a dozen sheep, and arranged that the drippings from the sheep upon it will run back into the tank. A small tank for dipping lambs may be made of matched plank, lined with zinc, and need not be of larger dimensions than 4 feet long by 2 feet 6 inches high, 18 inches wide at bottom, and 2 feet at top.

Fill the tank two-thirds full of the two-per-cent. solution, having it as hot as you care to keep your arm in continually. It is especially essential for sheep-dipping that the solution be hot. From the enclosed pen at the perpendicular end of the vat, the sheep are driven along the narrow alleyway and jumped into the vat, care being taken to put them below the surface. If one is dipping for ticks, they need not be held in any length of time; if for scab, they must be held in two minutes, and put beneath the surface two or three times, thoroughly soaking the scabs about the head with a brush. The lambs must be put through, also. Let the sheep stand on

the draining platform until they are crowded, then turn them into their shed. Their damp fleeces will help disinfect the shed.

Weak, thin sheep, if unclipped, often require help in coming from the tank, since the added weight of water in their fleece makes too heavy a load for them. Care must be taken with the lambs and smaller sheep that they do not get turned around in the vat and exhaust themselves in trying to get out at the perpendicular end of the vat.

A sheep that is heavy in lamb should never be dipped. The rough handling incident to jumping into the vat and climbing out is altogether too likely to cause abortion, and should not be permitted. This indicates that the proper time for dipping is after all have lambed, and preferably after all are clipped.

If there are only a few ticks upon the sheep, one dipping is sufficient; if the ticks are numerous, wait ten days from the first dipping for any eggs to hatch, and dip again. This second dipping will clean the flock.

The sheep should, in the fall, before coming to winter quarters, be run through the vat again, or treated by pouring. There is no pest which can be so easily eradicated as the tick, and yet causes so much loss. Let the man who has sheep annihilate these parasites, if he hopes for profit from his labor.

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Ames, Iowa.

PREDATORY ENEMIES OF THE WESTERN STOCKMAN.

At the National Live-stock Convention held in Ottawa last February, a resolution was brought forward by Mr. Wright, of Calgary, asking the Dominion Government to give a bounty to encourage the destruction of coyotes, panthers and wolves in Western Canada. The sheep industry, he urged, is practically at a standstill on account of the coyotes and wolves, and in British Columbia on account of the panthers. It has come to a stage, he declared, when people can hardly keep a stock of poultry. Foals and calves also suffer. The resolution was eventually changed to request the various Provincial Governments of Western Canada to give the bounties, but some of the discussion is interesting enough for reproduction.

Interrogated by the Chairman as to why the Dominion Government should be asked for this assistance, Mr. Wright ingeniously replied:

"Because it is a National matter. Take sheep-raising in Saskatchewan and Alberta, it is going to be of great value to the Eastern men to supply us with stock. Besides, we did not put the coyote there ourselves—it belongs to the Dominion. Laughter and applause.) Dr. Tolmie might tell you what destruction they do to the sheep in the West."

Dr. Tolmie (Victoria, B. C.)—I can say that in British Columbia, with its immense tracts of land fit for nothing else but sheep-raising, the industry is held back because of these wild animals, and when you see the people of Alberta eating frozen mutton there is something wrong, and the coyote is largely to blame for this condition. On the Coast we do not have coyotes, but we have wolves and panthers. I know one farmer on Vancouver Island who had killed thirty-five panthers in two years. The British Columbia Government during the last session increased the bounty on the panthers, coyotes and wolves, from \$7 to \$15 a head, and I am told that even with that inducement the panthers get away with 6 per cent. of the sheep. In Old Mexico they were badly troubled with this nuisance, and by carrying on a system of poisoning they have got rid of them pretty well. In Oregon they have also experienced trouble, but there, as in Mexico, the inhabitants all arranged to make a raid on these animals in the month of January, for that is the time they are pregnant. Then there is the plan of chasing them by dogs, but that is not satisfactory, nor is shooting. There is one method of poisoning that works pretty well. You take two grains of strychnine, put it into two or three capsules and insert them into an egg or piece of liver, or a prune; then a man takes a certain area, and he goes on horseback, dragging a bloody hide attached to the horse, and scatters this poisoned bait along the scented trail, being careful never to touch the bait with the naked hand, using a glove for the purpose. With regard to bounties on these animals, it is only right that the different provinces should offer it. In Alberta they give a small bounty, and I do not think it would be impossible for the Dominion Government to do as they have done in Oregon, for if we can establish more sheep in the West we will require more rams from the other parts of our country.

Dr. Bell—I do not think there is any special boundary between the provinces in this matter, that is, a coyote from Alberta can cross over to Saskatchewan, and I therefore think that the Dominion as a whole should look after the coyote.

Dr. Rutherford—While this resolution sounds very nice on the face of it, still I have very great doubts of the advisability of asking people of Nova Scotia and Prince Edward Island to increase the bounty on the killing of coyotes in Alberta. This is a matter always dealt with by the provinces. I remember when in the Manitoba Legislature, we increased the bounty on wolves, to the very great alarm of a number of gentlemen of the legal profession, who thought it a danger. The matter can be got over by the provinces, if the same principle is followed by each Province, and the same amount of bounty given in each case. I remember, in the Old Country, we used to be greatly troubled with rats, and there was a rat-catcher who in one year produced 750 tails, and the next year double that many heads. If he had produced the heads on the first occasion, I do not think the second crop would have been as great as it was. If the same regulations prevailed in the different Provinces, I do not see that there should be any difficulty in looking after their panthers and coyotes.

THE FARM.

THE BATH-ROOM IN FARMHOUSES.

Editor "The Farmer's Advocate":

I was interested in the letter of S. C. J., in your issue of April 23rd, on the subject of a bathroom in the farmhouse, and particularly in the scheme of a trough in the center of the roof, to run water into a square tank in the attic, and from that to the bathroom, where one can be arranged. The difficulty in adopting that idea in the case of most farmhouses built long ago is that the roof is too low, and the attic, where there is such a thing, too low to admit of a tank of any considerable capacity. Of course, in the case of new houses, provision can readily be made for all the improvements suggested by your correspondent, and which are all sensible and practicable, at a moderate expense. But in old houses, where no calculation has been made for such modern improvements, we must make the best use of what we have. Where a room cannot be spared for the bath, or a part of a room, by putting in a partition for this purpose, I am reminded of an instance where a corner of the spacious cellar in a farmhouse was partitioned off with matched Georgia pine sheeting, oiled and varnished, and used for a bathroom, the water being heated at the kitchen stove, and carried down stairs for the purpose, and the room heated in winter by means of a coal-oil stove costing not more than five dollars, and having a handle, like that of a bucket, so that it could be carried around, and used for heating a bedroom, if necessary. The used water, in this case, was carried by a pipe from the bathtub to the cellar drain, and was a very comfortable arrangement, which any farmer handy with tools could construct at little expense. The absence of this convenience in so many farmhouses, I am satisfied, is not due, in most cases, to penuriousness, but rather to want of consideration, the idea prevailing that, since it was not provided when the house was built, it is too late to think about it now; while, by a little study, and at a very moderate expense, in many cases, it could very well be arranged. The removal or rearranging of a partition or two is not so serious a matter as people are apt to think, and many old houses might be made much more convenient for working in by some such changes. It has been the experience of the writer to live in two farmhouses, built long ago, about as awkward in arrangement as could well be conceived, and which, by an expenditure of from one to two hundred dollars, were so much improved in their internal arrangements as to save many unnecessary steps, and to make the wife and family happy and proud of a dwelling that was formerly very unhandy and unsatisfactory. I am sure it is largely from want of thought, rather than the will, that more of such changes are not made, and the failure to provide a bathroom in most cases comes under this head.

Brant Co., Ont.

C. S.

SPLIT-LOG DRAG IN ALGOMA.

Editor "The Farmer's Advocate":

Having been a subscriber to your valuable paper for a few years, and seeing that so many farmers down east are interested in the split-log drag, I thought I would make one. I made it after D. W. King's plan, in one of the April issues, using 3 x 9 black-ash plank, as I had no log handy at the time. I gave it a trial, and think it is all your paper claimed it to be.

Algoma, Ont.

J. W. FOSTER.